

REMARKS

The Examiner has rejected claims 1-7, 9-11, 13-16 and 18-22 under 35 U.S.C. 103(a) as being unpatentable over International Patent Application No. WO 99/25107 to Frank et al., in view of U.S. Patent 4,974,251 to Ohta et al. The Examiner has further rejected claims 8 and 17 under 35 U.S.C. 103(a) as being unpatentable over Frank et al. in view of Ohta et al., and further in view of U.S. Patent Application Publication No. 2002/0136231 to Foschini et al.

The Frank et al. reference discloses call setup in mobile systems, in which a mobile terminal in the system includes "output means able to generate a human perceptual signal", "a transmitter able to transmit a human non-perceptual signal" and "a control unit configured to control the output means to create a representation of the human perceptual signal, and to instruct the transmitter to broadcast a human non-perceptual signal comprising the representation". However, as noted by the Examiner, "Frank does not explicitly show that the control unit is configured to instruct the output means to make a received human perceptual signal more noticeable if it is received from a nearby further electronic device and less noticeable if it is received from a remote further electronic device."

The Ohta et al. patent discloses a cordless telephone system.

While acknowledging that Frank et al. does not disclose the limitation "the control unit is configured to instruct the output means to make a received human perceptual signal more

noticeable if it is received from a nearby further electronic device and less noticeable if it is received from a remote further electronic device", the Examiner now indicates that Ohta et al. discloses this limitation and points out col. 9, lines 4-44 therein.

Applicants believe that the Examiner is mistaken. In particular, Ohta et al., at col. 9, lines 4-44, states:

"In this way, in the communication mode of the present embodiment, when the received electric field of the speech channel becomes less than $E1$ dB μ V and less than $E2$ dB μ V, the connection unit 1 and radio telephone set 2 mutually transfer the speech end signal therebetween to disconnect the radio communication circuit. This enables the prevention of wasteful use of the radio communication circuit between the connection unit 1 and radio telephone set 2. When the out-of-communication-range alarm signal is transmitted from the connection unit 1 or when the received electric field of the radio telephone set 2 becomes less than $E2$ dB μ V, this causes the radio telephone set 2 to issue the alarm tone. Thus, the user of the radio telephone set 2 can know that the radio telephone is in a bad communication state and can take a proper measure, for example, by putting the radio telephone closer to the connection unit 1.

"Further, in another embodiment of present invention, two levels $E3$ and $E4$ ($E4 < E3$) may be set in the connection unit 1 so that the connection unit issues the out-of-communication-range alarm signal when the received electric field becomes less than $E3$ dB μ V, whereas the unit transmits the speech end signal when it becomes less than $E4$ dB μ V. In this case, an alarm sound is generated in the radio telephone set 2 when the received electric field of the connection unit 1 becomes less than $E3$ dB μ V, and the radio communication circuit is forcibly cut off when the received field becomes less than $E4$ dB μ V. FIG. 4 shows a flowchart of the present embodiment which corresponds to the flowchart of FIG. 3(a), in which the step 522 in the flowchart of FIG. 3(a) is removed and the step 533 is modified to be one 533 in which it is judged whether or not the received electric field is not smaller than $E4$

dB μ V. That is, when it is determined that the received field becomes less than E4 dB μ V in the step 533, the connection unit generates a speech end signal (step 527), while, if the field is not smaller than E4 dB μ V then the unit judges whether or not to have received a dial signal (step 528)."

In this section, Ohta et al. indicates that when the electric field of a received signal becomes less than a first threshold level, the radio telephone set 2 generates an alarm sound, and when the electric field of a received signal becomes less than a second threshold lower than the first threshold, the communication is terminated.

The only change indicated in Ohta et al. in the received human perceptual signal based on distance is in one case, the received human perceptual signal is noticeable (within range), while in the other case, the "received" human perceptual signal is not noticeable (out of range), i.e., it is not received. Applicants submit that this is substantially different than what is claimed in, for example, claims 1, 9 and 19-22, "wherein the control unit is configured to instruct the output means to make a received human perceptual signal more noticeable if it is received from a nearby further electronic device and less noticeable if it is received from a remote further electronic device". In the both cases noted in the claim limitation, the received human perceptual signal is noticeable, however in one case it is more noticeable than in the other. This is described in the specification on page 4, lines 7-16, where the volume at which the received human perceptual signal is reproduced is increased as the electronic device is brought

closer to the further electronic device. Alternatively, the size of a window displaying the received human perceptual signal may increase as the electronic device is brought closer to the further. However, a prerequisite is that in any case, the received human perceptual signal must be noticeable.

The Foschini et al. reference discloses a time division multiple access over broadband modulation method and apparatus.

Claims 7 includes the limitation "further comprising is a receiver able to receive a further human non-perceptual signal, the control unit is able to use the receiver to detect a level of occupation of a transmission medium, and the control unit is able to instruct the transmitter to adapt its transmission power in dependency of the level of occupation".

The Examiner now states that Foschini et al. teaches this limitation at page 4, paragraph [0034].

Applicants believe that the Examiner is mistaken. In particular, the noted paragraph in Foschini et al. states:

"[0034] FIG. 1 is a block diagram of an exemplary communication system 100 with exemplary network architecture. One or more sources 101 are coupled via appropriate communication links 102 to deliver source information to a headend 103, which distributes the source information to one or more distribution hubs 105 via respective communication links 104. Each distribution hub 105 further distributes source information to one or more nodes 107 via communication links 106, where each node 107 in turn distributes the source information to one or more subscriber locations 109 via subscriber links 108. In the embodiment shown, bi-directional communication is supported in which upstream subscriber information from any one or more of the subscriber locations 109 is delivered to the corresponding distribution hub 105 via the corresponding subscriber links 108. Depending upon the

nature of the subscriber information and the network architecture, the subscriber information may be delivered to the headend 103, or to an appropriate source 101, by the corresponding distribution hub 105. Again, depending upon the nature of the subscriber information and the network architecture, the subscriber information may be further delivered to an appropriate source 101 by the headend 103."

After reviewing the above section, it should be apparent that Foschini et al. neither discloses nor suggests the claim 7 limitation "further comprising is a receiver able to receive a further human non-perceptual signal, the control unit is able to use the receiver to detect a level of occupation of a transmission medium, and the control unit is able to instruct the transmitter to adapt its transmission power in dependency of the level of occupation".

Furthermore, Applicants submit that Foschini et al. does not supply that which is missing from Frank et al. and Ohta et al., i.e., "the control unit is configured to instruct the output means to make a received human perceptual signal more noticeable if it is received from a nearby further electronic device and less noticeable if it is received from a remote further electronic device".

In view of the above, Applicants believe that the subject invention, as claimed, is not rendered obvious by the prior art, either individually or collectively, and as such, is patentable thereover.

Applicants believe that this application, containing claims 1-11 and 13-22, is now in condition for allowance and such action is respectfully requested.

Respectfully submitted,

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